

Amendment to the Specification:

*Please replace the paragraph on **page 3, lines 17-26** with the following amended paragraph:*

Preferably, in the encoder, there are N input channels which the analyzer is operable to process corresponding original input signals of the N input channels to generate for each time/frequency tile the parametric data, the analyzer being operable to output M(N-M) parameters together with M down-mix output signals for representing the input signals in the output data, M and N being integers and $M < N$. More preferably, in a case of the integer M being equal to two in the encoder, the down-mixer is operable to generate two down-mix output signals which are susceptible to being replayed in two-channel stereophonic apparatus and being coded by a standard stereo coder. Such a characteristic is capable of rendering the encoder and its associated output data backwardly compatible with earlier replay systems, for example stereophonic two-channel replay systems.

*Please replace the paragraph on **page 5, lines 28-33** with the following amended paragraph:*

The present invention will be described in first and second contexts. In the first context, the invention is concerned with an encoder which is operable to process original input signals to generate corresponding encoded output data capable on being ~~subsequent~~ subsequently decoded in a decoder to regenerate perceptually more precise representations of the original input signals than hitherto possible. In the second context, the invention is concerned with specific example embodiments of the invention.

*Please replace the paragraph on **page 7, lines 26-31** with the following amended paragraph:*

The six original input signals denoted by 400 to 450 comprise: a left front audio signal 400, a left rear audio signal 410, an effects audio signal 420, a center audio signal 430, a rear right front audio signal 440 and a right rear audio signal 450. The effects signal 420 preferably has a bandwidth of substantially 120 Hz for use in simulating rumble, explosion and thunder effects for example. Moreover, the input signals 400, 410, 430, 440, 450 preferably correspond to 5-channel home movie sound channels.

*Please replace the paragraph on **page 8, lines 1-8** with the following amended paragraph:*

The processing unit 20 comprises a segment and transform unit 100, a parameter analysis unit 110, a parameter to PCA angle unit 120 and a PCA rotation unit 130. The transform unit 100 includes transformed left-front and left-rear outputs 700, 710 respectively coupled to the PCA rotation unit 130 and the parameter analysis unit 110. A first parameter set output 720 is coupled via the PCA angle unit 120 to the PCA rotation unit ~~420~~ 130. The rotation unit ~~420~~ 130 is operable to process the outputs 700, 710 and the first parameter set output to generate the processed output 500. Processing within the unit 20 is performed on the basis of time/frequency tiles.

*Please replace the paragraph on **page 8, lines 9-16** with the following amended paragraph:*

Similarly, the processing unit 30 comprises a segment and transform unit 200, a parameter analysis unit 210, a parameter to PCA angle unit 220 and a PCA rotation unit 230. The transform unit 200 includes transformed ~~left-front and left-rear~~ effects audio

and centre audio outputs 800, 810 respectively coupled to the PCA rotation unit 230 and the parameter analysis unit 210. A fourth parameter set output 820 is coupled via the PCA angle unit 220 to the PCA rotation unit 220. The rotation unit 220 is operable to process the outputs 800, 810 and the fourth parameter set output to generate the processed output 510. Processing within the unit 30 is also performed on the basis of time/frequency tiles.

*Please replace the paragraph on **page 8, lines 17-24** with the following amended paragraph:*

Similarly, the processing unit 40 comprises a segment and transform unit 300, a parameter analysis unit 310, a parameter to PCA angle unit 320 and a PCA rotation unit 330. The transform unit 300 includes transformed ~~left-front and left-rear~~ right-front and right-rear outputs 900, 910 respectively coupled to the PCA rotation unit 330 and the parameter analysis unit 310. A second parameter set output 920 is coupled via the PCA angle unit 320 to the PCA rotation unit ~~320~~ 330. The rotation unit ~~320~~ 330 is operable to process the outputs 900, 910 and the second parameter set output to generate the processed output 520. Processing within the unit 40 is performed on the basis of time/frequency tiles.